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WSU-16/PCT

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To:
SHMUEL LIVNAT
VENABLE LLP
P.O. ~~BOX 34385~~ McKenna, Long & Aldridge
~~WASHINGTON~~, DC 20043-9998

PCT

INVITATION TO PAY ADDITIONAL FEES

(PCT Article 17(3)(a) and Rule 40.1)

Applicant's or agent's file reference	Date of Mailing *(day/month/year)* 26 May 2006
	PAYMENT DUE within 15 days from the above date of mailing
International application No. PCT/US03/39873	International filing date *(day/month/year)* 16 December 2003 (16.12.2003)
Applicant WAYNE STATE UNIVERSITY	

1. This International Searching Authority

(i) considers that there are 10 *(number of)* inventions claimed in the international application covered by the claims indicated below/on an extra sheet:
Please See Continuation Sheet

and it considers that **the international application does not comply with the requirements of unity of invention** (Rules 13.1, 13.2 and 13.3) for the reasons indicated below/on an extra sheet:
Please See Continuation Sheet

(ii) ☐ has carried out a partial international search (see Annex) ☒ will establish the international search report on those parts of the international application which relate to the invention first mentioned in claims Nos.: 1-37 and 41 (all in part)

(iii) will establish the international search report on the other parts of the international application only if, and to the extent to which, additional fees are paid.

2. The applicant is hereby **invited**, within the time limit indicated above, to pay the amount indicated below:

$210.00	X 9	= $1,890.00
Fee additional per invention	number of additional inventions	total amount of additional fees

The applicant is informed that, according to Rule 40.2(c), **the payment of any additional fee may be made under protest,** i.e., a reasoned statement to the effect that the international application complies with the requirement of unity of invention or that the amount of the required additional fee is excessive.

3. ☒ Claim(s) Nos. 44 have been found to be unsearchable under Article 17(2)(b) because of defects under Article 17(2)(a) and therefore have not been included with any invention.

Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/ US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201	Authorized officer Valerie Bell-Harris for Chang-Yu Wang Telephone No. 571-272-1600

Form PCT/ISA/206 (July 1992)

INVITATION TO PAY ADDITIONAL FEES

International application No.
PCT/US03/39873

This International Search Authority has found 10 inventions claimed in the International Application covered by the claims indicated below:
This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claim(s) 1-37 and 41 (all in part), drawn to a polypeptide of SEQ ID NO:6 and the first method of making and using the polypeptide of SEQ ID NO: 6.

Group II, claim(s) 1-37 and 41 (all in part), drawn to a polypeptide of SEQ ID NO:8 and the first method of making and using the polypeptide of SEQ ID NO: 8.

Group III, claim(s) 1-37 and 41 (all in part), drawn to a polypeptide of SEQ ID NO:12 and the first method of making and using the polypeptide of SEQ ID NO: 12.

Group IV, claim(s) 1-37 and 41 (all in part), drawn to a polypeptide of SEQ ID NO:16 and the first method of making and using the polypeptide of SEQ ID NO: 16.

Group V, claim(s) 1-37 and 41 (all in part), drawn to a polypeptide of SEQ ID NO:18 and the first method of making and using the polypeptide of SEQ ID NO: 18.

Group VI, claim(s) 38-40 and 42-43 (all in part), drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:5 for gene/cell therapy.

Group VII, claim(s) 38-40 and 42-43 (all in part), drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:7 for gene/cell therapy.

Group VIII, claim(s) 38-40 and 42-43 (all in part), drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:9 for gene/cell therapy.

Group IX, claim(s) 38-40 and 42-43 (all in part), drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:13 for gene/cell therapy.

Group X, claim(s) 38-40 and 42-43 (all in part), drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:17 for gene/cell therapy.

1. This International Searching Authority considers that the international application does not comply with the requirements of unity of invention (Rules 13.1, 13.2 and 13.3) for the reasons indicated below:
The inventions listed as Groups I-X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:
Group I is drawn to a polypeptide of SEQ ID NO:6 and the first method of making and using the polypeptide of SEQ ID NO: 6.
Group II is drawn to a polypeptide of SEQ ID NO:8 and the first method of making and using the polypeptide of SEQ ID NO: 8.
Group III is drawn to a polypeptide of SEQ ID NO:12 and the first method of making and using the polypeptide of SEQ ID NO: 12.
Group IV is drawn to a polypeptide of SEQ ID NO:16 and the first method of making and using the polypeptide of SEQ ID NO: 16.
Group V is drawn to a polypeptide of SEQ ID NO:18 and the first method of making and using the polypeptide of SEQ ID NO: 18.
Group VI is drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:5 for gene/cell therapy.
Group VII is drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:7 for gene/cell therapy.
Group VIII is drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:9 for gene/cell therapy.
Group IX is drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:13 for gene/cell therapy.
Group X is drawn to a pharmaceutical composition comprising cells transformed with DNA SEQ ID NO:17 for gene/cell therapy.
The inventions listed as Groups I-X do not relate to a single general inventive concept because the composition and structural/functional features are different within these Groups.The use and results from Groups I-X are different. They do not share a common corresponding technical feature. Since they do not share a common technical feature, they do not have a single inventive concept, thus lack unity of invention.

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.
In order for more than one species to be examined, the appropriate additional examination fees must be paid. The species are as follows:
i. If any one Group from Groups I-X is elected, Applicant is requried to elect one species of vector selected from: PLP-GFP/DM20-GFP; PLP-GFP/DM-GFP Tet-on; PLP-GM/DM20-GFP M1L; PLP-GFP/DM20-GFP M1L/M205L; PLP-GFP/DM20-GFP M1L/M234L; PLP-GFP/DM20-GFP M1L/M205L/M234L; PLP recited in the claims 28 and 30. Currently, claims 10, 27, 29, 32, 34, 41, 42, 43, 44 and 45 are generic.
ii. If any one Group from Groups I-X is elected, Applicant is required to elect a species of cell type selected from A) neuronal cell, B) glial cell, C) neural stem cell, D) oligodendrocyte progenitor cell, E) embryonic stem cell or F) hemopoietic stem cell recited in the claims 24, 26, 38 and 40 for procecution . Currrently, claims 32, 34, 43, 44 and 45 are generic

INVITATION TO PAY ADDITIONAL FEES

International application No.
PCT/US03/39873

The inventions listed as Groups 1-X do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: The composition and structural features are different in different SEQ ID NOs and vectors. In addition, each species of cell type has its unique composition and biological characteristics. For example, the cell lineage and funciton of oligodendrocyte are different from those in neuronal cells or hemopoietic cells. The oligodendrocytes are responsible for myelination and neurons are responsible for synaptic transmission or plasticity. Therefore, these species do not share a common technical feature and so lack unity of invention.

INVITATION TO REQUEST RECTIFICATION

International application No.
PCT/US03/39873

The abstract in the page 79 is missing.

There are two claim 44. The second claim 44 should be claim 45.